

**RELATIONSHIP BETWEEN EMOTIONAL INTELLIGENCE OF PRIMARY SCHOOL 4<sup>TH</sup>  
AND 5<sup>TH</sup> GRADE STUDENTS AND THEIR TEACHERS**

**Asst. Prof. Dr. Soner POLAT**

**Kocaeli University,  
Faculty of Education  
spolat@kocaeli.edu.tr**

**Asst. Prof. Dr. Yıldız ULUSOY-ÖZTAN**

**Kocaeli University,  
Faculty of Education  
yildizoz@kocaeli.edu.tr**

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### **Abstract**

*Students gain many skills by observing, following and imitating others. Today one of the skills which students need most is managing emotions. The models who the elementary students imitate most are the teachers in their learning process. Therefore, teachers have an important role in students' gaining the skill of emotion management. From this point of view, teachers should exemplify the skill of emotion management well. Hence, this survey aims to reveal the relationship between fourth and fifth grade students and teachers' emotional intelligence perception. The data of the survey was gathered from the fourth and fifth grade students and teachers in the schools in central district of İzmit chosen by chance with the emotional intelligence perception scale of Wong and Law (2002). At the end of the survey, a meaningful and positive connection was found out between the students and teachers' emotional intelligence perception. It is seen that teachers' emotional intelligence management skill affects the emotional intelligence skill which students use positively and is an important explanatory variable. Accordingly, enhancing teachers' skilful use of emotional management has an effect on the improvement of students' own emotional management.*

**Key Words:** *emotional intelligence, emotion management, student, teacher*

### **Introduction**

Emotional intelligence (EI) is based on the concept of "social intelligence," which was first defined by E.L. Thorndike in 1920. Since then, many other intelligences have been defined by psychologists and they have all been classified into three main groups: abstract intelligence (the ability to understand and make good use of verbal and mathematic symbols), concrete intelligence (the ability to understand and make good use of objects), and social intelligence (the ability to understand and relate to people) (Ruisel, 1992). Thorndike defined social intelligence as “the ability to understand and manage men and women, boys and girls—to act wisely in human relations.” Like Thorndike, Gardner (1993) defined social intelligence as one of the seven intelligence domains in his theory of multiple intelligences. According to Salovey & Mayer (1990), EI comprises Gardner's inter- and intrapersonal intelligences, and includes abilities under five domains.

Bar-On defines emotional intelligence as the totality of a person's emotional, personal and social skills to be able to cope with environmental demands and pressures (Møller, 1999: 218).

Salovey and Mayer (1990:189) were the first to use the term “emotional intelligence” to define people's ability to manage their emotions. They defined emotional intelligence as “the subset of social intelligence that involves the ability to monitor one's own and others' feelings and emotions, to discriminate among them and to use this information to guide one's thinking and actions”. Recently, in the light of Salovey and Mayer's definition of emotional intelligence, Goleman (1996) claimed that EI comprises of such abilities as self-awareness, managing emotions, motivating oneself, empathy, and handling relationships.

In this study, we have used the Mayer and Salovey's (1997:10) definition of EI as a set of interrelated skills concerning “the ability to perceive accurately, appraise, and express emotion; the ability to access and/or generate feelings when they facilitate thought; the ability to understand emotion and emotional knowledge; and the ability to regulate emotions to promote emotional and

intellectual growth''. Salovey and Mayer (1990) and Mayer & Salovey (1997) defined four distinct dimensions of EI.

We have also used Davies et al.'s (1998) definition of EI because it represents more of the entire EI literature and they have considered Mayer and Salovey's (1997); Salovey & Mayer' (1990) definition of EI. Moreover, Davies et al.'s definition of EI is actually quite similar to the definition of Mayer and Salovey and also it's in line with Ciarrochi et al.'s (2000) summary of the four basic areas of EI. The way Davies et al. define the dimensions of EI enables us to focus on the nature and characteristics of the EI construct. In this study, we use the four-dimensional definition of EI developed by Davies et al. (1998). These four EI dimensions are as follows:

*Self emotional appraisal (SEA)*: This relates to the individual's ability to understand their deep emotions and be able to Express these emotions naturally. People who have great ability in this area will sense and acknowledge their emotions well before most people.

*Others' emotional appraisal (OEA)*: This relates to peoples' ability to perceive and understand the emotions of those people around them. People who are high in this ability will be much more sensitive to the feelings and emotions of others as well as reading their minds.

*Regulation of emotion (ROE)*: This relates to the ability of people to regulate their emotions, which will enable a more rapid recovery from psychological distress.

*Use of emotion (UOE)*: This relates to the ability of individuals to make use of their emotions by directing them towards constructive activities and personal performance.

Psychological, educational, and management researchers and consultants have recently become more interested in the topic of emotional intelligence (EEI). Proponents of the EI state that EI influences people's physical and mental health as well as their career achievements (e.g., Goleman, 1996). Some recent leadership theories also propose that emotional and social intelligence are highly important for leaders and managers since cognitive and behavioral complexity and flexibility significant for effective leadership (Boal & Whitehead, 1992).

Salovey ve Mayer(1990) define such terms as empathy, expressing emotions, managing temperament, independence, compatibility, favour, determination, solving interpersonal problems, humaneness, politeness and respect as significant qualities for success. Following them, Goleman (1996) has emphasized the importance of emotional intelligence skills in gaining success especially in educational contexts in his book called "Emotinal Intelligence" and he has pioneered practices in this field. According to Goleman, emotional competence which depends on emotional intelligence enhances one's performance at work and it can be learned. He states that one's success in life depends on his/her ability to balance and manage his/her emotions.

Goleman (1996) states that the ability to manage troublesome emotions is highly significant for emotional health and he adds that extreme and everlasting emotions destroy emotional intelligence. Therefore, Shapiro (1997) focuses the importance of teaching children how to manage their emotions to help them become more compatible, controlled and as a result happier individuals. He also

emphasizes the necessity of teachers' conscious, planned actions to teach these skills rather than their parental instincts, lifestyles and daily habits.

People with a high level of emotional intelligence are more efficient in self-awareness, self-management, empathy, motivation, social and communicative skills (Goleman, 1996). These skills can be developed in certain contexts through careful planning. Albert Bandura tried to explain his socio-cognitive theory through behavioral and social learning approaches. According to him, people learn behaviors through observing role models (Senemoğlu, 2007). It's known that both direct experience and observing others' experiences influence people's learning.

EI requires the ability to recognize, understand and manage emotions of ourselves and other people who we relate to. In this respect, it is insufficient for a person to understand and manage his/her own emotions and wishes. Social skills which are included in the concept of EI are based on sharing. Positive social relations require being sensitive to others. This domain of EI predicts not only establishing healthy relationships but also being comfortable and safe while experiencing these relationships (Stein and Book, 2000). Developing emotional intelligence at school is important in acquiring school aims and developing educational skills.

The primary aim of teachers is to enable students to become physically and emotionally healthy citizens and also to help them realize their personal and professional aims (Stein and Book, 2000) to become successful in life. This requires teachers to become more efficient models in terms of emotional intelligence. Teachers should not only become role models to develop students emotional intelligence but also search for ways to develop their emotional skills through effective orientation techniques, which is only possible through becoming more equipped with methods and techniques to develop emotional intelligence.

There are many theories claiming that EI affect many variables related to job context such as job performance, job satisfaction, absenteeism, commitment and leadership. (Cooper ve Sawaf, 1997; Gates, 1995; Goleman, 1996; Megerian ve Sosik, 1996). Social scientists have recently started to focus on the relationship of EI to other phenomenon like leadership (Ashforth and Humphrey, 1995), group performance, individual performance, interpersonal/social exchange, managing change, and conducting performance evaluations (Goleman, 1996).

Emotions influence many aspects of a person's life such as learning, interpersonal relations and health. People who can recognize and control their own emotions and also can recognize and respond to others' emotions become much more successful in life compared to the rest (Schilling, 2009). There is also research in our country indicating that EI affects students' success positively (Arıcıoğlu, 2002). Especially those students whose emotional skills are developed establish more balanced relationships with their teachers, parents and friends. Balanced social relationships bring about many positive qualities such as self-confidence, personal success, cooperation and sharing.

### **Aim of Research**

The primary aim of this research is to determine EI levels of primary school fourth and fifth grade students and teachers, and then to find out whether teachers' level of EI affect students' level of EI.

### **Method**

#### **Model of Research**

This research to determine the relationship between teachers' and students' EI is a descriptive study which was conducted using relational survey method.

#### **Universe and Sample**

The universe of the research comprises of 14758 participants, 14349 (7138 fourth grade, 7211 fifth grade) students and 409 (203 fourth grade, 206 fifth grade) teachers from primary schools in İzmit, Kocaeli.

The sample of the research was determined through stratified sampling method. 46 primary schools in the centre of İzmit were first classified in terms of their socio-economic status and success rates into three categories as high (15 schools), medium (15 schools) and low (16 schools). From each of these three categories, five schools were chosen randomly and in this way 15 schools were selected. In these schools, there are 40 fourth grade and 50 fifth grade classes. 90 fourth and fifth grade teachers and 630 students (total number of seven randomly chosen students of each teacher) has become the sample of this research. However, 84 of 90 teachers and 587 of the students filled in and delivered the scales.

#### **Means of Data Collection**

We used the Wong Law Emotional Intelligence Scale (WLEIS, Wong and Law, 2002). Because all of the above EI-related scales did not measure EI on the basis of Davies et al.'s (1998) proposed four-dimensional definition, we also included the newly developed 16-item WLEIS as a final measure of EI. The scale measures typical behavior and it consists of four subscales that are consistent with Mayer and Salovey's (1997) definition of EI. WLEIS attempts to measure perception of own (Self Emotional Appraisal-SEA) and others emotions (Others Emotional Appraisal-OEA), regulation of emotions (ROE) and utilization of emotions (UOE).

The analysis of all the main constructs was done based on self-report measures collected through multi-item scales. Psychometric properties of the scales are well-established and responses to all items were made on 5-point Likert-type scales (1 = strongly disagree, 5 = strongly agree). Since participants were Turkish, two translators first translated all the scales into Turkish and these translators then compared their versions until they agree on the most accurate translation. Finally, these scales were translated into English by a bilingual, native English speaking translator, who

followed the procedure recommended by Brislin (1980). The few discrepancies between the original English version and the back-translated version resulted in adjustment in the Greek translation based on direct discussion between the translators. The specific measures used in the analysis and sample items of the relevant constructs are outlined.

Trial of the scale was carried out with 65 students randomly chosen from senior year students at Kocaeli University Faculty of Education. Reliability co-efficient of this trial is .87. Students were also asked to mark items which were difficult to understand and, as a result, three items were found to be problematic. These three items were revised and the scale was redesigned in two forms, one for students and one for teachers.

After this 16-item scale was distributed to collect data, factor analysis was carried out and it was observed that items were grouped under three dimensions (table 1). One item (Item 2 “I always tell myself I am a competent person”) was removed from the scale since it was included in all three dimensions. When these dimensions were compared to the original scale, it was observed that dimensions of self emotional appraisal and use of emotions were collected under one dimension in our scale. Three dimensions observed were called self emotional appraisal and use (SEAU), others’ emotional appraisal (OEA), regulation of emotion (ROE).

**Table 1: Factor Analysis Results of EI Scale**

Items no	Items	SEAU	OEA	ROE
I4	I have good understanding of my own emotions	,783		
I7	I always set goals for myself and then try my best to achieve them.	,769		
I12	I would always encourage myself to try my best	,730		
I13	I always know whether or not I am happy	,711		
I14	I really understand what I feel	,682		
I9	I have a good sense of why I have certain feelings most of the time	,482		
I16	I am a self-motivated person	,469		
I1	I am a good observer of others’ emotions		,761	
I8	I always know my friends’ emotions from their behaviour		,709	
I11	I have good understanding of the emotions of people around me		,701	
I5	I am sensitive to the feelings and emotions of others.		,605	
I10	I can always calm down quickly when I am very angry			,807
I15	I am able to control my temper and handle difficulties rationally			,755
I3	I am quite capable of controlling my own emotions			,578
I6	I have good control of my own emotions			,496

According to Salovey and Mayer, EI has three dimensions: appraisal and expression of emotion, regulation of emotion and utilization of emotion as intelligence (Salovey ve Mayer, 1990).The factor analysis results of the scale are compatible with this classification.

Reliability co-efficient of EI scale is .91. Reliability co-efficient of each sub-dimension is as follows: SEAU .88, OEA .66, ROE .74.

### **Distribution, Gathering of Data Collection Tools, and Analysis of Data**

Student and teacher forms of data collection tools were distributed to and collected from fourth and fifth grade teachers and to randomly chosen students of these teachers at schools in the sample. Data collected from each seven student of each teacher was entered and then means of each teachers and their students were calculated, which made it possible to compare emotional intelligence of teachers and students. Thus, a database was formed for 84 teachers and students of 84 classes.

In this research, we looked at means to determine the emotional intelligence level of teachers and students. While evaluating means, 1.00-1.79 was labeled as “very low”, 1.80-2.59 as “low”, 2.60-3.39 as “medium”, 3.40-4.19 as “high” and 4.20-5.00 as “very high”. Through looking at correlation between sub-dimensions resulted from factor analysis, relationship between variables was determined. While evaluating correlation coefficients, between 0.70-1.00 was regarded as “high”, between 0.69-0.30 was regarded as “medium”, 0.29 and lower was regarded as “low” (Büyüköztürk, 2005). As it got closer to 0.00, it was considered to be unrelated. Regression analysis was carried out to determine how much research variables affect and explain each other.

### **Findings and Discussion**

#### **EI Levels of Teachers and Students**

Means regarding EI levels of teachers and students and their sub-dimensions are given in table 2. When these means are analyzed, it can be seen that EI levels of both teachers and students are “high”. Both teachers and students have significant perception of SEAU. In terms of ROE, teachers and students have lower perceptions compared to other dimensions. Generally, another point that attracts attention regarding means is that students’ perceptions are higher than those of teachers’.

**Table 2: Means regarding EI levels of teachers and students and their sub-dimensions**

	Teachers		Students		t	p
	Mean	Std. Deviation	Mean	Std. Deviation		
SEAU	4,21	,52	4,34	,41	-1.614	.11
OEA	4,19	,53	4,00	,52	2.936	.00
ROE	3,71	,77	3,94	,42	2.261	.02
EI	4,07	,48	4,15	,39	-1.256	.21.

There’s not a significant difference between teachers’ and students’ perceptions of EI ( $t=-1.256; P>.05$ ). However, perceptions of two sub-dimensions of EI, OEA ( $t=2.936; P<.01$ ) and ROE ( $t=2.261; P<.05$ ) revealed a significant difference. It can be observed that teachers are more successful in recognizing others’ emotions while students are better than teachers in management of emotions.

### Relationship Between EI of Teachers and Students

Correlation coefficients which show the relationship between teachers' EI and students' EI are given in Table 3.

**Table 3: Relationship between teachers' EI and students' EI**

		Students			
		SEAU	OEA	ROE	EI
Teachers	SEAU	,17	,22**	,03	.17
	OEA	,26*	,41**	,12	.30**
	ROE	,14	,21	,10	.17
	EI	.22*	.32**	.09	.25*

\*\* Correlation is significant at the 0.01 level (2-tailed).

\* Correlation is significant at the 0.05 level (2-tailed).

Correlation coefficient between teachers EI, which is predictive variable, and students' EI, which is predicted variable, reveals a low level positive relationship ( $r=0,25$ ) (table 3).

Results of regression analysis to determine if teachers' EI predict students' EI are given in table 4.

**Table 4 Simple regression analysis to determine if teachers' EI predict students' EI**

Model 1		Dependent Variable: Students EI			
Predictors Variable	B	ShB	$\beta$	t	p
Constans	3,338	,355		9,408	,000
Teachers EI	,200	,087	,247	2,309	,023
R= 0,247	R <sup>2</sup> =0,061				
F(1,83)=5,332	p=.023				

As it is seen in Table 4, teachers' EI is predictive of students' emotional intelligence. ( $R=0,247$ ,  $R^2=0,061$ ,  $p<.05$ ). Teachers' EI expresses nearly 6% of variance in students' EI.

Looking at correlations between sub-dimensions of teachers' EI and students EI, a very low positive relationship can be between teachers' SEAU and students' EI ( $r=0,17$ ), and between teachers' management of emotion and students' EI. ( $r=0,17$ ). Also, it can be seen that there is a medium level and positive relationship between teachers' OEA and students' EI ( $r=0,30$ ).

Results of regression analysis to determine if teachers' EI and its sub-dimensions and students' EI are given in Table 5.



**Tablo 4 Results of multiple regression analysis to determine if teachers' EI and its sub-dimensions and students' EI**

<b>Model 2</b> Predictors Variable Teachers EI	Dependent Variable: Students EI				
	B	ShB	$\beta$	t	P
Constans	3,201	,379		8,444	,000
SEAU	-,002	,104	-,027	-,196	,8452
OEA	,218	,095	,296	2,293	,024
ROE	,003	,064	,065	,515	,608
R= 0,312	R <sup>2</sup> =0,097				
F(3,847)=2,872	p=.041				

As it is seen in Table 5, the model regarding how sub-dimensions of teachers' EI predict students' EI is significant ( $R=0,312$ ,  $R^2=0,097$ ,  $p<.05$ ). Three sub-dimensions of teachers' EI, SEAU, OEA and ROE, express nearly 9% of the variance in students' emotional intelligence. However, when the significance of t value examined, only OEA dimension of teachers' EI significantly predicts students' emotional intelligence ( $\beta=0,296$ ;  $t=2.293$ ;  $p<.05$ ). It is observed that SEAU and ROE dimensions of teachers' EI does not significantly predict students' EI.

When the table that compares the relationship between sub-dimensions of teachers and students' EI is analyzed, a positive and low level relationship can be observed between teachers' SEAU and students' OEA ( $r=.22$ ;  $p<.01$ ), and teachers' OEA and students' SEAU ( $r=.26$ ;  $p<.05$ ). Also, a significant, medium level linear relationship can be observed between teachers' OEA and students' OEA ( $r=.41$ ;  $p<.01$ ) (table 3).

### Results and Recommendations

This research has revealed that both teachers' and students' level of EI are high. It was observed that perception of sub-dimensions of EI followed the same order both for teachers and students. Sub-dimensions of EI were perceived in this order from the highest to the lowest: SEAU, OEA and ROE.

There's not a significant difference between teachers' and students' perceptions of EI. However, perceptions of OEA and ROE sub-dimensions of EI differed significantly. While teachers' are more competent in recognizing others' emotions, students seem to be more efficient than teachers in management of emotions.

There is a low level, linear, significant relationship between teachers' EI and students' EI. Regression analysis showed that teachers' EI is predictive of students' EI, though at low levels.

A significant, medium level, linear relationship was found out between OEA sub-dimension of teachers' EI and students' EI. Regression analysis showed that only OEA sub-dimension of teachers' EI significantly expressed students' EI.

Research has shown that there is a positive linear relationship between teachers' EI and students' EI. Therefore, development of teachers' emotional intelligence will directly affect

development of students' emotional intelligence. Giving teachers training both at theoretical and practical levels will be an opportunity for them to use their EI as much as possible. Thus, teachers will become more sensitive to develop students' EI and consequently they will put more effort in developing students' EI. In addition, students learn many things by observing their teachers. Students observing teachers who use their EI at the highest level will get the chance to develop their EI.

Management of emotions is the most crucial dimension of EI that teachers and students need the most. It is essential to focus on management of emotions in seminars that will be given to teachers. Thus, teachers ability to manage their emotions increases, which in turn will increase students' ability to manage their emotions.

This research has revealed that students' emotional intelligence is mostly affected by OEA dimension of teachers EI. Therefore, teachers need to be more sensitive to recognizing their students' emotions. Teachers who know their students' strengths and weaknesses in terms of EI can develop their students' EI through behaving accordingly.

In addition, integrating the concept of EI into teacher education and primary education programs is significantly important in terms of informing teachers and students about the issue and developing their related skills.

### References

- Arıcıoğlu, A. (2002). Yönetmel başarılarının değerkemesinde duygusal zekanın kullanımı, *Akdeniz İktisadi ve İdari Bilimler Fakültesi Dergisi*, 4: 26-42.
- Ashforth, B.E. & Humphrey, R.H. (1995). Emotion in the workplace: A reappraisal. *Human Relations*, 48(2), 97-125.
- Boal, K. B., & Whitehead, C. J. (1992). *A critique and extension of the stratified systems theory perspective*. In R. L. Phillips, & J. G. Hunt (Eds.), *Strategic leadership: a multi organizational-level perspective* ( pp. 237–255). Westport, CT: Quorum.
- Büyüköztürk, Ş. (2002). *Sosyal Bilimler İçin Veri Analizi Elkitabı*. Ankara: Pegem Yayınıılık.
- Ciarrochi, J. V., Chan, A. Y. C., & Caputi, P. (2000). A critical evaluation of the emotional intelligence construct. *Personality and Individual Differences*, 28(3), 539–561.
- Cooper, R.K. ve Sawaf, A. (1997). *Executive EQ: Emotional Intelligence in Leadership and Organizations*, New York, Grosset/Putnam.
- Davies, M., Stankov, L., & Roberts, R. D. (1998). Emotional intelligence: In search of an elusive construct. *Journal of Personality and Social Psychology*, 75, 989–1015.
- Gardner, H. (1993). *Multiple intelligences: The theory in practice*. New York: Basic Books.
- Gates, G. (1995). A review of literature on leadership and emotion: exposing theory, posing questions, and forwarding an agenda, *Journal of Leadership Studies*, 2 (3): 98–110.
- Goleman, Daniel. (1996). *Duygusal Zeka Neden IQ'dan Daha Önemlidir?* İstanbul: Varlık Yayınları.

- Law , K.S., Wong, C. ve Song, L.J. (2000). The construct and criterion validity of emotional intelligence and its potential utility for management studies, *Journal of Applied Psychology*, 89 (3): 483–496.
- Mayer, J. D., & Salovey, P. (1997). What is emotional intelligence? In P. Salovey (Ed.), *Emotional development and emotional intelligence* (pp. 3–31). New York: Basic Books.
- Megerian, L.E ve Sosik, J. (1996). An affair of the heart: emotional intelligence and transformational leadership, *Journal of Leadership Studies*, 3 (4): 31–48.
- Moller, Claus. (2000). *Hearthwork*. Hillerod: TMI.
- Ruisel, I. (1992). Social intelligence: Conception and methodological problems. *Studia Psychologica*, 34(4-5), 281-296.
- Salovey, P., & Mayer, J. D. (1990). Emotional intelligence. Imagination, *Cognition and Personality*, 9(3), 185–211.
- Schilling, D (2009). *Duygusal zeka beceri eğitimi uygulamaya yönelik pratik bir model ve 50 aktivite* (Çev. Karahan, TF., Yalçın, BM., Yılmaz, M, ve Sardoğan, M.E.). Ankara: Maya akademi yayıncılık.
- Senemoğlu, N. (2007). *Gelişim, Öğrenme ve Öğretim: Kuramdan Uygulamaya*. (13. Baskı). Ankara: Gönül Yayıncılık ve Matbaacılık
- Shapiro, L. E. (1997). *Yüksek EQ'lu Bir Çocuk Yetiştirmek*. (Ümran Kartal, Çev.). Varlık Yayınları AŞ., İstanbul.
- Stein, S. J. & Book, H. E. (2000). *EQ-Duygusal Zeka ve Başarının Sırrı*. (Müjde Işık, Çev.). Özgür Yayınları, İstanbul.
- Wong, C. S., & Law, K. S. (2002). The effects of leader and follower emotional intelligence on performance and attitude: An exploratory study. *The Leadership Quarterly*, 13, 243–274.